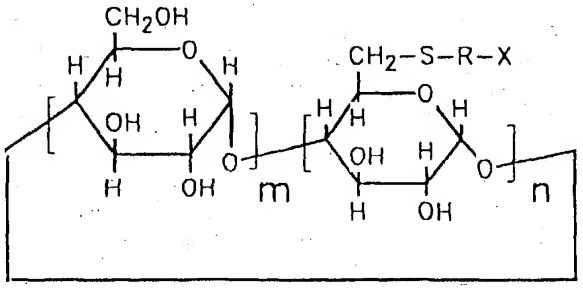
Claims.

1. A 6-mercapto-cyclodextrin derivative having the general formula I



Formula I

wherein m is 0-7 and n is 1-8 and m+n = 7 or 8;

R is (C_{1-6})alkylene, optionally substituted with 1-3 OH groups,

or $(CH_2)_o$-phenylene-$(CH_2)_p$;

o and p are independently 0-4;

X is COOH, $CONHR_1$, $NHCOR_2$, SO_2OH, $PO(OH)_2$, $O(CH_2\text{-}CH_2\text{-}O)_q$-H, OH or tetrazol-5-yl;

R_1 is H or (C_{1-3})alkyl;

R_2 is carboxyphenyl;

q is 1-3;

or pharmaceutically acceptable salts thereof;

with the exclusion of

6-*per*-deoxy-6-*per*-(2-hydroxyethylthio)-β-cyclodextrin;

6-mono-deoxy-6-mono-(2-hydroxyethylthio)-β-cyclodextrin;

6-*per*-deoxy-6-*per*-(2-hydroxyethylthio)-γ-cyclodextrin;

6-*per*-deoxy-6-*per*-(carboxymethylthio)-β-cyclodextrin;

6-mono-deoxy-6-mono-(carboxymethylthio)-β-cyclodextrin;

6A,6B-dideoxy-6A,6B-bis[(o-carboxyphenyl)thio]-β-cyclodextrin;

6A,6B-dideoxy-6A,6B-bis(carboxymethylthiol)-β-cyclodextrin and

6-*per*-deoxy-6-*per*-(2,3-dihydroxypropylthio)-β-cyclodextrin.

2. The 6-mercapto-cyclodextrin derivative according to claim 1, wherein R, m and n are defined as in claim 1 and X is COOH or SO_2OH; or a pharmaceutically acceptable salt thereof.

3. The 6-mercapto-cyclodextrin derivative according to claim 1, wherein m is 0; n is 8; R is (C_{1-6})alkylene or $(CH_2)_o$-phenylene-$(CH_2)_p$; o and p are independently 0-4; and X is COOH or SO_2OH; or a pharmaceutically acceptable salt thereof.

4. A 6-mercapto-cyclodextrin derivative according to any of claims 1-3 selected from:
6-*per*-deoxy-6-*per*-(2-carboxyethyl)thio-γ-cyclodextrin;
6-*per*-deoxy-6-*per*-(3-carboxypropyl)thio-γ-cyclodextrin;
6-*per*-deoxy-6-*per*-(4-carboxyphenyl)thio-γ-cyclodextrin;
6-*per*-deoxy-6-*per*-(4-carboxyphenylmethyl)thio-γ-cyclodextrin;
6-*per*-deoxy-6-*per*-(2-carboxypropyl)thio-γ-cyclodextrin; and
6-per-deoxy-6-*per*-(2-sulfoethyl)thio-γ-cyclodextrin;
or a pharmaceutically acceptable salt thereof.

5. A 6-mercapto-cyclodextrin derivative according to the general formula I of claim 1 for use in therapy.

6. The use of a 6-mercapto-cyclodextrin derivative according to the general formula I of claim 1 for the manufacture of a medicament for the reversal of drug-induced neuromuscular block.

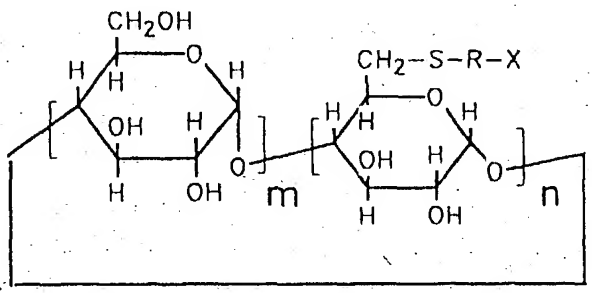
7. A kit for providing neuromuscular block and its reversal comprising (*a*) a neuromuscular blocking agent, and (*b*) a 6-mercapto-cyclodextrin derivative according to the general formula I of claim 1.

8. The kit according to claim 6, wherein the neuromuscular blocking agent is selected from the group consisting of rocuronium, vecuronium,

pancuronium, rapacuronium, mivacurium, (cis)atracurium, tubocurarine and suxamethonium.

9. The kit according to claim 7, wherein the neuromuscular blocking agent is rocuronium.

10. A pharmaceutical composition comprising a 6-mercapto-cyclodextrin derivative having the general formula I



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R_1 is H or (C_{1-3})alkyl;

R_2 is carboxyphenyl;

q is 1-3;

or a pharmaceutically acceptable salt thereof, in admixture with pharmaceutically acceptable auxilliaries.

11. A method for reversal of drug-induced neuromuscular block in a patient, which comprises parenterally administering to said patient an effective amount of a 6-mercapto-cyclodextrin derivative according to the general formula I of claim 1.